such as a former employer, as part of retirement benefits—only the portion paid by the enrollee should be considered part of the person's liability.9

The distribution of overall individual liability for the noninstitutionalized elderly increases with income except for those with family incomes above \$30,000 (see Table 6). Family per capita expenditures on supplemental insurance and the proportion of individuals covered also rise with income-again with the exception of those in the highest income groups where coverage increases but premiums fall. 10

If individual liability is expressed as a percentage of average income of families in each category, per capita liability ranges from 16 percent of family income for those with family incomes below \$10,000 in 1984 to 2 percent for those in the highest income group. Average liability for all noninstitutionalized elderly is over 4 percent of family income. Moreover, this figure indicates that the noninstitutionalized elderly are directly liable, on average, for almost one-third of their total health care expenditures. 11

Although no information is directly available on the coverage provided by private insurance plans, Medicare supplemental insurance-commonly referred to as "Medigap"--generally pays the coinsurance and deductible amounts under Medicare and sometimes also covers catastrophic hospital coverage. More comprehensive--and expensive--plans also cover other services not covered by Medicare, such as drugs. Private insurance for nursing home care is generally not available.

The importance of the existence of, and coverage provided by, private insurance for Medicare enrollees is the protection it offers against increased

^{9.} It may be that another household member actually pays these privately incurred costs. Since family rather than per capita income is used for this analysis, the problem is not severe.

^{10.} As would be expected, average total individual liability is higher than the combined family and private insurance amounts reported for total medical expenditures in Figure 3. Costs of private insurance include administrative and selling costs, for example, in addition to the expected medical benefits.

^{11.} This figure is difficult to estimate precisely, however, since overall expenditure figures are generally available only for medical expenses and do not adjust for the cost of insurance.

TABLE 6. AVERAGE INDIVIDUAL LIABILITY FOR MEDICAL CARE FOR NONINSTITUTIONALIZED ELDERLY MEDICARE ENROLLEES BY INCOME, 1977 (In 1984 dollars)

Family Income Category	Private Insurance Average				
	Out-of-Pocket Medical Expenditures	Percentage Purchasing Coverage	Premium Per Covered Individual ^a	Total Individual Liability ^b	
\$5,000 and Less	670	28.6	396	784	
\$5,001 - \$10,000	. 687	44.6	416	873	
\$10,001 - \$15,000	693	50.5	440	915	
\$15,001 - \$20,000	627	64.8	453	921	
\$20,001 - \$30,000	748	69.9	472	1,077	
\$30,001 and Above	696	72.0	417	996	
All Noninstitutional	ized	•			
Elderly Enrollees	690	55.2	435	930	

SOURCE: National Medical Care Expenditure Survey.

- a. Insurance paid for by others is not included here.
- b. Individual liability is the sum of out-of-pocket expenditures on medical care and the average per capita insurance premium (paid by the family) among all enrollees.

cost-sharing.¹² For the elderly population whose private insurance pays for Medicare deductibles and coinsurance, increased cost-sharing would raise the price of insurance (and therefore overall medical expenditures as well), but the insurance would protect them against extraordinary individual liability during a year of unusually high medical expenditures.

^{12.} About 65 percent of the noninstitutionalized elderly are covered by private insurance. This figure is higher than that reported in Table 6 since it includes insurance paid for by others.

REIMBURSEMENT AND LIABILITY

To understand the potential impact on enrollees of changes in the benefit structure, it is important to consider two patterns of Medicare-related enrollee liability--not only the costs of Medicare-covered services not reimbursed by Medicare, but the pattern of Medicare reimbursement. On the one hand, the individual liability figures provide information on the potential impact of any benefit structure changes that would be consistent with the current pattern of coinsurance and deductibles. For example, a large portion of current Medicare liability arises from SMI coinsurance, and the effect of an increase in that coinsurance would follow closely the patterns of current liability. On the other hand, if hospital coinsurance—which is now very limited—was expanded, the pattern of Medicare reimbursement among enrollees would be a better indicator of who would be affected and by how much.

Medicare-Related Liability

Medicare-related enrollee liability is defined here as SMI premiums, and required deductible amounts and coinsurance for both HI and SMI paid by beneficiaries. For purposes of this discussion, added charges by physicians and other suppliers above Medicare-allowed charges will not be included--largely because of the difficulty in quantifying these charges. Medicare-related liability represents only a portion--approximately 40 percent--of total individual noninstitutional liability, which as described earlier includes both Medicare-related liability and costs to individuals for other noncovered services and for private health insurance.

The calculation of Medicare-related liabilities requires two steps. First, 1984 projections of the premium, deductible amounts, and coinsurance can be made from program data. Such amounts do not reflect what enrollees would be required to pay, however. Since Medicaid and private insurance provide coverage for many Medicare enrollees, a second adjustment is needed to reflect the influence of these programs. Medicaid generally would pay the Medicare-related liability for persons covered by both programs. For those with private insurance, the issue is more complicated.

If private insurance is paid by some other party such as a former employer, the enrollee will be largely protected against any increase in Medicare-related liability. 13 For those who purchase their own supple-

^{13.} This assumes that such insurance provides "first dollar" coverage that pays for Medicare deductibles and coinsurance.

mental coverage to pay the deductibles and coinsurance, an increase in such cost-sharing would raise their liability, possibly by something more than the average cost-sharing increase (through higher insurance premiums). 14 These persons would, however, benefit by being protected against any extraordinary increase in liability. That is, higher hospital coinsurance could substantially raise-perhaps by thousands of dollars-the liability of an uninsured person with a long hospital stay, while the increased liability of an insured person would be limited to approximately the average increase in costs for all covered persons, many of whom would not have a hospital stay in any given year.

For a few high-income elderly enrollees who do not have private insurance, some relief from catastrophic expenses is available through the medical deduction allowed in the calculation of federal income taxes. Since the incomes of the elderly are generally low and a large portion of these incomes--particularly Social Security benefits--are not subject to tax, most of the elderly cannot benefit from the medical deduction. Moreover, even for those claiming it, the tax benefits would be no more than half of the amount of catastrophic expenses. No attempt is made here to estimate such benefits.

Two estimates of Medicare-related liability are shown in Table 7, the first of which reflects the total average level of Medicare cost-sharing by income. The second set of figures adjusts for actual individual liability (after subtracting the contributions of other payers). Medicaid is assumed to reimburse recipients for all out-of-pocket costs related to Medicare-covered services. The adjustment for those with private insurance lowers the liability in proportion to the share of the insurance cost paid by the employer. The two averages in the table can be compared to illustrate the likely protection from liability for coinsurance and deductibles afforded by Medicaid and by insurance paid by others. Since these are averages, no additional adjustment is made for purchase of private supplemental insurance.

^{14.} Indeed, since insurance companies add the costs of marketing and administering their programs to premium charges, costs to Medicare enrollees with private insurance of a rise in cost-sharing might be greater than that average increase.

^{15.} The data used here are not sufficiently detailed to indicate, for example, actual types of care covered under private insurance and whether those with Medicaid coverage were eligible for the full period under study. Consequently, these results are illustrative only.

TABLE 7. AVERAGE MEDICARE-RELATED LIABILITY BY INCOME FOR NONINSTITUTIONALIZED ELDERLY ENROLLEES, 1977 (In 1984 dollars)

	Average	Average Medicare- Related Enrollee Liability ^b		
Family	Total Annual	In	As Percent	
Income Category	Cost-Sharing ^a	Dollars	of Income	
\$5,000 and Less	428	296	8.1	
\$5,001 - \$10,000	503	396	5.4	
\$10,001 - \$15,000	478	416	3.4	
\$15,001 - \$20,000	424	386	2.2	
\$20,001 - \$30,000	444	385	1.6	
\$30,001 and Above	431	377	0.6	
All Noninstitutionalize	ed .			
Elderly Enrollees	457	381	1.8	

SOURCE: Congressional Budget Office simulation from National Medical Care Expenditure Survey and Medicare History Sample.

- a. Includes SMI premiums and Medicare deductibles and coinsurance.
- b. Cost-sharing by enrollees after adjusting for payments by Medicaid and private insurance financed by other payors such as former employers.

Medicare cost-sharing for elderly noninstitutionalized enrollees is projected to average \$457 in 1984, of which about \$76 will be paid by someone other than the enrollee. Payments from sources other

^{16.} The figures estimated here are not directly comparable with those in Table 6 or Figure 3 since additional adjustments have been made here to make the projections from the National Medical Care Expenditure Survey compatible with program data. In addition, no allowance is made for the cost of insurance over and above the average beneficiary liability from cost-sharing—that is, for marketing and administrative costs.

than enrollees themselves are proportionately greater for those with incomes below \$10,000, where Medicaid benefits are concentrated. Those in the lowest income categories will spend 8 percent of their projected incomes on Medicare-related liability, while elderly persons with family income in excess of \$30,000 will devote less than 1 percent to such medical expenses.

Overall, just over 2 percent of all elderly enrollees are projected to have Medicare cost-sharing expenses in excess of \$2,000 in 1984 (see Table 8). Almost three-quarters of the enrollees will incur cost-sharing amounts of less than \$500. These figures are based on program data, however, that contain no information on private insurance coverage, since it is necessary to use program data based on a very large sample size to obtain reliable estimates of the distribution of these liabilities. 17

Among the noninstitutionalized elderly population, high users of Medicare-covered services are not particularly more likely to have Medicaid or private insurance coverage. About 55 percent of all noninstitutionalized elderly Medicare enrollees purchased private insurance in 1978--a figure that is likely to have grown over the past five years. The percentage of the elderly population purchasing private insurance was lower--35 percent--for those reporting no medical expenditures, but relatively constant for persons at varying (but positive) levels of total medical expenditures. For example, only 54 percent of those with medical expenditures in excess of \$10,000 (in 1984 dollars) purchased private insurance. Over 61 percent of persons with medical expenses between \$1,000 and \$2,000 purchased insurance. The decision to purchase insurance is affected by income, attitudes, and other factors in addition to anticipated health status. 19

^{17.} Moreover, this data set contains all enrollees and not just noninstutionalized persons. The institutionalized population may have a higher than average proportion of users with large cost-sharing liability.

^{18.} Medical expenditures do not include payments for insurance coverage. Persons using no medical care may underreport coverage by insurance, however.

^{19.} Little is known about the comprehensiveness of insurance protection or all the conditions under which insurance may not be available. In general, however, it appears that most of the elderly could purchase insurance, although there is sometimes a waiting period for coverage of pre-existing conditions.

TABLE 8. DISTRIBUTION OF ELDERLY ENROLLEES BY MEDICARE-RELATED COST-SHARING, 1978

Cost-Sharing Amounts ^a (in 1984 dollars)	Percent of Elderly Enrollees		
Less than \$300	51.4		
\$301 - \$500 \$501 - \$1,000	22.6		
\$501 - \$1,000	14.6		
\$1,000 - \$2,000	9.1		
\$2,001 - \$3,000	1.3		
\$3,001 - \$4,000	0.4		
More than \$4,000	0.4		

SOURCE: Medicare History Sample.

a. The cost-sharing amounts include SMI premiums and all Medicare deductibles and coinsurance. The Medicare History Sample does not capture all SMI liability. For those who do not meet the deductible limit, it is not possible to estimate their Medicare liability precisely. Thus, \$40--reflecting the missing data--has been added to each enrollee's liability. In addition, SMI charges above the allowable charge, and hospital costs after benefits have been exhausted, are not included.

Enrollee liability from SMI will represent nearly 80 percent of total Medicare cost-sharing in 1984--which will average \$505 in 1984.20 SMI coinsurance and deductible amounts for all elderly beneficiaries are projected to average \$231 in 1984, and SMI premiums to be \$172, while HI deductibles and coinsurance will average only \$102. A more detailed description of these components of Medicare-related liability by age is contained in Appendix C.

^{20.} This figure does not include any SMI charges in excess of the 20 percent of allowable charges that beneficiaries must pay. Nor does it include hospital costs after benefits have been exhausted. This average is higher than that for the noninstitutionalized elderly reported in Table 7, in part because of differences in enrollees included but also because the NMCES data used in Table 7 are not as inclusive.

Reimbursement for Medicare-Covered Services

The pattern of reimbursement for Medicare-covered services strongly reflects hospital use. Since the required amounts for cost-sharing from hospital stays of fewer than 60 days per spell of illness are relatively low, reimbursements display a considerably different distribution than does Medicare-related cost-sharing.

Reimbursements were unevenly spread over the Medicare elderly population, with over two-fifths of enrollees receiving no reimbursed services (see Table 9).²¹ Another 27 percent had reimbursements of less than \$500 (expressed in 1984 dollars). Reimbursements at the upper end can be very high indeed; over 5 percent of recipients received services for which reimbursements were in excess of \$10,000.

TABLE 9. DISTRIBUTION OF ELDERLY ENROLLEES BY REIMBURSEMENT LEVELS, 1978

Total Reimbursement (in 1984 dollars)	Percent of Elderly Enrollees ^a		
\$0	43.3b		
\$0 \$1 - \$500	27.4		
\$1 - \$500 \$501 - \$1,000 \$1,001 - \$5,000 \$5,001 - \$10,000	6.5		
\$1,001 - \$5,000	12.2		
\$5,001 - \$10,000	5.4		
\$10,000 and Above	5.1		

SOURCE: Medicare History Sample.

- a. Sample is limited to those enrolled in both HI and SMI.
- b. This percentage will be closer to 30 percent in 1984, since the proportion of enrollees exceeding the deductible will approach 70 percent.

^{21.} Since 1978, however, the proportion of elderly qualifying for SMI reimbursements has risen to nearly 68 percent.

Average reimbursement for Medicare services declines steadily by income group except for those with 1984 incomes above \$20,000 (see Table 10).²² These differences in Medicare reimbursement are largely a result of differences in hospitalization, so the pattern is much more pronounced for HI, which is dominated by inpatient hospital services. Enrollees aged 80 and above have HI reimbursements twice as great as those for enrollees 65 through 69.

TABLE 10. AVERAGE MEDICARE REIMBURSEMENT PER ENROLLEE BY FAMILY INCOME CATEGORY, 1978 (In 1984 dollars)

Family Income Category	Medicare Reimbursement		
\$5,000 and Less	2,100		
\$5,001 - \$10,000	1,978		
\$10,001 - \$15,000	1,648		
\$15,001 - \$20,000	1,540		
\$20,001 - \$30,000	1,643		
\$30,001 and Above	1,639		
All Noninstitutionalized Elderly Enrollees	1,763		

SOURCE: National Medical Care Expenditure Survey.

Extraordinary Users of Medicare

About 11 percent of elderly Medicare enrollees had reimbursement in 1978 of \$5,000 or more (in 1984 dollars). Altogether, reimbursement to these beneficiaries represented about three-fourths of all Medicare spending. Since increased cost-sharing for such persons could increase their liability substantially, options to expand cost-sharing might be designed with an upper limit. This would permit substantial increases in cost-sharing

^{22.} The figures presented here are not strictly comparable to the averages in Table 5. Not only do they come from different data sources, but since it was not possible to disaggregate these averages by income into HI and SMI components, an average weighting factor had to be used instead of separate weights for HI and SMI as was done in Table 5.

while still protecting those who would otherwise be left with major burdens.²³

Although average reimbursement for all enrollees was \$1,773 per enrollee in 1978 (expressed in 1984 dollars), a small percentage of enrollees were much larger users: the top 11 percent of Medicare beneficiaries receiving reimbursed services averaged \$12,600 in costs. In general, the beneficiary's share of costs was also very high for these individuals-averaging \$1,675 in 1984 dollars.²⁴ The limited information available suggests that the combined effect of Medicaid and private insurance coverage is likely to protect about three-quarters of the high users of Medicare-covered services from extraordinary individual liability, however.

Characteristics of Users Incurring Large Costs. Enrollees using extensive Medicare-covered services are more likely to be older, have at least one period of hospitalization and to die during the year than are elderly enrollees in general. Although income data are not available for these large users, age may serve as a partial proxy for ability to absorb high out-of-pocket costs--at least for the elderly. For example, the average income of those aged 80 and above is only 81 percent of that for persons aged 65 through 69, implying that a disproportionate share of these high users of services also have limited incomes as compared to the general enrollee population.

As compared to all elderly enrollees in 1978, those with reimbursed services costing over \$5,000 were older and more likely to have been hospitalized and to have died in that year (see Table 11). Almost all--98 percent--of these extensive users of medical care had at least one hospital stay, and 5 percent had a total of 60 days or more in a hospital in 1978.

In addition, over one-fifth of those with extensive use of Medicare-covered services in 1978 died during the year. Indeed, almost 14 percent of total 1978 Medicare reimbursements to the elderly were for the less than

^{23.} This is, of course, only partial protection since persons with high Medicare covered expenses may also have high expenses for other services such as drugs and nursing home care that would not be included in any limit.

^{24.} This includes only cost-sharing on Medicare-covered services and therefore excludes the costs of hospital days once benefits have been exhausted.

TABLE 11. SELECTED CHARACTERISTICS OF ELDERLY ENROLLEES WITH HIGH AMOUNTS OF REIMBURSED MEDICARE SERVICES, 1978a

	Percent of Users Incurring High Costs	Percent of All Elderly Medicare Enrollees	
Aged 75 Through 79 Aged 80 and Above	21.4 31.0	19.7 22.6	
No Hospital Stay Hospitalized More Than	1.9	79.6	
60 Days in 1978	4.9	0.6	
Died in 1978	12.4	2.6	

SOURCE: Medicare History Sample.

a. Reimbursement amounts of \$5,000 or more (in 1984 dollars).

3 percent of beneficiaries who died in that year.²⁵ In such cases, increases in cost-sharing for covered services—especially hospitalization—would affect the estates of decedent Medicare enrollees rather than being a direct burden on elderly beneficiaries themselves. On the other hand, the surviving relatives may also be elderly.

Medicare Use Over Time. Beneficiaries with the highest reimbursement amounts for Medicare services in 1978 were likely also to be extraordinary users of covered services in 1977, and to a lesser extent this relationship remains true for the entire 1974-1978 period. Thus, those with catastrophic expenses in any one year are likely to face even greater burdens over a period longer than a year. Only 4.1 percent of all elderly enrollees used services costing Medicare in excess of \$10,000 in 1977 (in

^{25.} Actually this figure understates the share of expenditures spent during the last year of a person's life, since for many only part of a year's expenses are included—for example, for an enrollee who died on February 1, these data reflect only one month's costs.

1984 dollars), but for those who incurred reimbursements in excess of \$10,000 in 1978, 18.8 percent also had at least that level in 1977 (see Table 12). In 1974, the relationship is less strong, but those with the highest amounts of reimbursed services in 1978 were still 2.5 times more likely to have high reimbursements as were 1974 enrollees as a whole.

TABLE 12. DISTRIBUTION OF 1978 MEDICARE REIMBURSEMENTS FOR THE ELDERLY COMPARED WITH REIMBURSEMENTS FOR SAME PATIENTS IN 1974 AND 1977 (In percents)

	1978 Reimbursements (in 1984 dollars)				
Former Reim- bursements (in 1984 dollars)	\$0	\$1-\$5,000	\$5,001- \$10,000	\$10,000 and Above	All Elderly
1977 Reimbursement	······································				-
\$0 \$1 - \$5,000	75.0	27.9	28.2	23.1	48.2
\$1 - \$5,000	22.0	61.4	50.9	47.1	42.8
\$5,001 - \$10,000	2.1	6.2	10.4	11.0	4.9
\$10,001 and above	1.0	4.5	10.5	18.8	4.1
1974 Reimbursement					
\$0	75.8	45.8	45.6	41.6	58.1
\$1 - \$5,000	20.1	45.5	41.2	41.6	34.4
\$5,001 - \$10,000	2.3	4.9	7.1	8.1	4.1
\$10,001 and above	1.8	3.8	6.1	8.6	3.4

SOURCE: Medicare History Sample.

NOTE: For example, of those whose reimbursement in 1978 was \$5,001-\$10,000, 28.2 percent had a 1977 reimbursement of \$0, 50.9 percent had a 1977 reimbursement of \$1-\$5,000, and so on. For that same 1978 reimbursement group (\$5,001-\$10,000), 45.6 percent of them had a reimbursement in 1974 of \$0, 41.2 percent had a 1974 reimbursement of \$1-\$5,000, and so on.

CHAPTER IV. THE EFFECTS OF BENEFIT STRUCTURE CHANGES

This chapter considers some of the broad issues that would arise with most options to increase the share of Medicare costs paid by enrollees, and with other options to improve protection against catastrophic medical expenses. It discusses ways of deferring cost-sharing liability. Finally, it deals with the means-testing issue. Specific options and their effects are analyzed in Chapter V.

SOURCES OF FEDERAL SAVINGS FROM MEDICARE COST-SHARING

Increased cost-sharing would lower Medicare outlays, both from the direct effect of shifting liability onto beneficiaries and from the reduction in the use of Medicare-covered services that would likely result from these increased beneficiary costs. The magnitude of the impact from each source, however, would likely depend upon the way in which cost-sharing increases were structured.

The Direct Effect of Increased Cost-Sharing

A one-dollar increase in beneficiary payments as a result of costsharing would translate directly into a corresponding decrease in Medicare reimbursements. Total federal outlays might not decline by the full amount, however, if other federal programs—such as Medicaid—picked up some of the additional costs passed on to beneficiaries.

If cost-sharing was introduced only to provide these direct savings, the major issue would be what form of cost-sharing would best distribute the burden. Changes yielding equal savings could be obtained in more than one way--for example, by assessing hospital coinsurance in the early days of a stay or by increasing coinsurance on physician visits. Since the number of users of hospital services is much smaller in any year than the number of persons with reimbursed physician visits, the distributional effects of the two alternatives would be quite different.

In general, changes that would raise costs by a small amount for most Medicare beneficiaries might be favored over those that would concentrate the increase in costs upon a few. If so, cost-sharing increases would need to focus on deductible amounts or on SMI premiums. If the intent was to reduce the burden on low-income groups or the very old, the mix of

coinsurance and deductibles could be adjusted to avoid services heavily used by these groups. As noted in Chapter III, persons over 80 are more likely to have hospital stays than younger persons, and the distribution of medical use by income groups varies more dramatically for hospitalization than for physician visits. Increased hospital coinsurance would thus have a greater impact on the very old and on those with low incomes than would comparable increases in physician coinsurance.

Indirect Effects of Cost-Sharing Through Reduced Use of Medical Care

Additional reductions in outlays for Medicare could be achieved if cost-sharing operated to discourage use of covered medical services. The desirability of such a decrease in the use of medical care depends upon the extent to which the health status of beneficiaries may be adversely affected.

As with most goods and services, a rise in the price of medical care is likely to reduce consumption. The extent to which this happens depends on the sensitivity of consumers to price changes. In the case of medical insurance, if patient liability rises from, say, 10 percent to 20 percent of charges, the effective price of the service to the patient will double.²

^{1.} In addition, some have argued that cost-sharing could be used to encourage patients to use lower-cost providers by requiring patients using such providers to pay a greater dollar amount of cost-sharing than those obtaining the same services from lower-cost providers. Such proposals have most frequently been made with regard to hospital stays. The recent passage of a prospective hospital reimbursement system has largely made such options superfluous, however. Since the purpose of the prospective hospital payment scheme is to encourage hospitals to bring their own costs into line with others, an indemnity plan permitting them to pass on costs to beneficiaries could dilute the incentives established by prospective reimbursement.

^{2.} In the case of the elderly and disabled, it is important to consider not only the cost-sharing required by Medicare, but also the extent to which these enrollees also have private supplemental coverage that would alter the effective price. Much of the discussion that follows is based on Joseph P. Newhouse and others, Some Interim Results from a Controlled Trial of Cost-Sharing in Health Insurance (Santa Monica: Rand Corporation, January 1982). A more detailed presentation of these results can be found in Appendix E.

The Rand Study. The most comprehensive study of cost-sharing and health insurance to date is being conducted for the Department of Health and Human Services by the Rand Corporation. Like most studies on cost-sharing, this one excludes the elderly. Whether Medicare beneficiaries would respond in the same way as the younger population in the Rand study is not known. Moreover, no evidence is yet available—from this or any other study—as to the effect of changes in the use of medical services on patients' health.

Results from this experiment—which are just now becoming available—are consistent with earlier nonexperimental findings in this area: with only a few exceptions, price affects both the number of people using medical services and the number of ambulatory medical visits per user. At the lowest extreme, families facing 95 percent coinsurance spent only \$254 on health care while those with free care (no coinsurance) spent \$401. Even a 25 percent coinsurance plan resulted in family expenditures 14 percent less than that for free care. Finally, the Rand study found that coinsurance on physician visits has an important impact on hospital use. For families in the plan with 95 percent coinsurance on ambulatory services but free care for inpatient services, the probability of hospital admission was less than for families whose insurance fully paid for all types of care.³

Implications for Medicare Cost-Sharing. If persons 65 and over behave in the same manner as younger persons, the results from the Rand study suggest that increased cost-sharing under Medicare-particularly on physician services—would result in somewhat lower use of medical services than under the present benefit structure. An early study of the impact of Medicare on use of medical services found that such cost-sharing caused use to rise, particularly of short-stay hospital care. However, the SMI portion of Medicare already has considerable cost-sharing, so that increases in it might have a relatively small effect. Moreover, the medical expenditures of young, nondisabled persons are quite different from those of Medicare beneficiaries, reflecting in part different preferences for consumption

^{3.} At first consideration this seems counterintuitive since one might suppose that families with free hospitalization but high coinsurance costs for outpatient care would attempt to substitute inpatient for outpatient services whenever possible. Rather, this finding suggests that it is the doctor who initiates hospitalization for a patient. If persons see doctors less as a result of high ambulatory coinsurance rates, this seems in itself to hold down hospital admissions, even if hospital care is "free."

^{4.} See Regina Lowenstein, "Early Effects of Medicare on the Health Care of the Aged," Social Security Bulletin (April 1971), pp. 3-20.

of health care and perhaps less sensitivity of the aged to the price of such care. On the other hand, the lower income levels of the aged and disabled could make them more responsive to differences in the price of care.

It is likely that some changes in use would occur with any expansion of Medicare coinsurance or deductibles. The Rand study finding that coinsurance on physician visits has an important impact on probability of hospitalization suggests that this might be as effective in lowering hospital use as hospital coinsurance itself. Alternatively, cost-sharing could be kept relatively low on some services to encourage their use, perhaps as a substitute for more expensive care, while raising it on other services. This would follow from the belief that cost-sharing requirements may discourage persons from seeking preventative care or early treatment, thereby leading to greater long-run costs of care. In addition, cost-sharing could be coordinated to ensure that persons who choose low-cost care would not face higher out-of-pocket expenses than those who use a higher-cost alternative. Currently this approach is not always followed. For example, existing coinsurance on ambulatory (SMI) services may make tests in the hospital less expensive to the patient than those in a doctor's office.

The Role of Private Supplemental Health Insurance. Nearly two-thirds of the elderly and disabled currently have private supplemental insurance coverage—often referred to as "Medigap"—that pays a large share of the deductible and coinsurance costs of Medicare. Medicaid, the other major public program, covers about 14 percent of Medicare enrollees. Together, Medigap insurance and Medicaid protect three-fourths of the elderly and disabled against liability for cost-sharing of Medicare—covered services. Such coverage reduces the net price of a particular medical service to zero, thus defeating efforts to reduce medical care use by imposing higher out-of-pocket costs.

If enrollees continued to purchase such insurance after an increase in Medicare cost-sharing, much of the effect of such a change on use would be

^{5.} Such insurance may not always provide comprehensive coverage. A 1979 survey of Blue Cross-Blue Shield plans indicated, however, that even the inexpensive options tended to pay the deductible amounts and coinsurance, particularly for HI.

^{6.} In addition to Medicaid, there may be other overlaps from programs such as veterans' health assistance. Veterans' health programs are used by only 1 percent of the elderly although that figure is likely to rise as World War II veterans increasingly take advantage of such services.

lost.⁷ On the other hand, higher Medicare cost-sharing would result in larger premiums for Medigap insurance, which might discourage its purchase somewhat. Also, insurers might offer less comprehensive plans, thereby implicitly leaving some cost-sharing in place.

Since Medicare actually pays for much of the increased medical care use that results from private insurance coverage, the price of the private insurance does not fully reflect the costs of such higher use. That is, if private coverage of SMI coinsurance led to an increase in physician visits, for example, Medicare would be liable for 80 percent of the increased costs of that use. This could be rectified through a tax on insurance companies.⁸

Medicaid, which aids some low-income aged and disabled persons, has the same effect as private insurance in protecting some Medicare enrollees from cost-sharing liability. States now have the option of introducing some cost-sharing in Medicaid, but this is likely to be limited by concern about the low incomes of participants. As a joint federal-state program, however, some of the costs of increased use as well as of protection for patient liability would be borne by the federal government.

BENEFIT STRUCTURE CHANGES REDUCING BENEFICIARY LIABILITY

Some changes in Medicare coverage could be introduced that would limit beneficiary liability from increased cost-sharing but could still yield

^{7.} The limited empirical evidence available in this area suggests that this would indeed be the case. See, for example, Marjorie Smith Carroll and Ross H. Arnett III, "Private Health Insurance Plans in 1978 and 1979: A Review of Coverage, Enrollment and Financial Experience," Health Care Financing Review, vol. 3 (September 1981), pp. 55-87; and Stephen H. Long, Russell F. Settle, and Charles R. Link, "Who Bears the Burden of Medicare Cost Sharing," Inquiry, vol. 19 (Fall 1982), pp. 222-34.

^{8.} If the tax was coordinated with imposition of additional cost-sharing, it could discourage some enrollees from purchasing first-dollar coverage, thereby retaining some of the incentives to use fewer Medicare services. It would also recover the costs of the additional services used by those who would continue to buy comprehensive private supplemental insurance. Since this paper is restricted to cost-sharing changes, such an option is not considered here. For more information, see Congressional Budget Office, Containing Medical Care Costs Through Market Forces (May 1982).

net savings in federal outlays. Under current law, Medicare's catastrophic protection is weak--both because coinsurance amounts may accumulate for those who use covered services extensively, and because of the gaps in coverage, particularly for nursing home care.

One element of many cost-sharing proposals is a ceiling or "cap" on patient liability for covered Medicare expenditures. Such a cap could protect patients from a hospital stay or from large physician bills that could wipe out much or all of a family's savings, particularly when proposals include increased hospital coinsurance. To the extent that the cap would provide catastrophic protection, beneficiaries might be better able to absorb modest increases in yearly medical costs. In any one year the elderly and disabled normally face only routine medical expenses, but may feel compelled to budget for the prospect of catastrophic bills in the event of long hospital or institutional stays.

In addition to an annual limit, a separate multiyear cap might also be introduced to protect those with high cumulative bills over a three- or five-year period, for example. Such a cap would presumably reflect an average annual limit of less than the yearly cap, recognizing that over a period of years high medical expenses could severely erode the resources of the elderly and disabled. An example would be a two-tiered cap of \$3,000 for any one year but \$5,000 over any three-year period (with some annual adjustment for inflation).

The chief disadvantage of such caps on liability are that they would substantially increase Medicare outlays—or, if combined with cost-sharing increases, result in considerably lower net savings. If a cap was set high enough to avoid this problem, it might not provide much protection for those with limited resources. Finally, a cap incorporating both HI and SMI cost-sharing would generate coordination problems. For example, allocating the effects of the limit across the two portions could be done in several ways, each of which would have differential impacts on the two trust funds.

BENEFIT STRUCTURE CHANGES DEFERRING BENEFICIARY LIABILITY

Another approach that would offer some protection against catastrophic expenditures would be to allow Medicare enrollees to defer Medicare-related costs until after their deaths. Medicare could temporarily pay the increased cost-sharing, and after their deaths obtain payment from their estates. The liability could be deferred until the death of both spouses and any dependents, and be specifically limited to the value of the estate. Such an approach would be similar to the property tax deferrals that some states offer elderly homeowners.

Either mandatory or voluntary deferral would be possible.⁹ A mandatory deferral coupled with increased cost-sharing, would defer all increases in patient liability. At death, those whose estates were small would pay none of the cost-sharing. Such an approach implicitly assesses greater liability against those with greater resources.¹⁰ A voluntary deferral could be combined with expanded coverage, say for nursing home care, paid by the estates of beneficiaries.

A deferral option could maintain more of the federal savings from greater cost-sharing than a simple cap on cost-sharing. That is, while a cap essentially eliminates additional liability, at least part of deferred cost-sharing would eventually be recovered. Moreover, such an approach would implicitly allow beneficiaries to spread the cost of one year's extraordinary medical care costs over time.

Many practical problems arise, however, with a deferral option. Some enrollees might transfer assets to relatives to limit the size of their estates—and hence the share of the deferred cost—sharing that could be recovered by the Medicare program. It To minimize this, relatives could be held liable for deferred liability up to the amount of assets received within a given period before those medical expenses were incurred.

An additional difficulty with deferral options arises because a large share of the out-of-pocket costs of the elderly occur in the last year of life. During that period, a patient may not be capable of making decisions about the nature of medical care received. Instead, relatives of the patient are likely to be directing that care. If increased care would result in claims on the enrollee's estate, relatives would have an incentive to choose less care in order to enhance the value of the estate. Whatever their response, a decision in the patient's interest would be made more difficult by the deferral provision.

^{9.} With current data, it is not possible to estimate the effects such options would have on beneficiaries or the potential savings to the federal government. Consequently, this approach is only treated in general terms here, and is not included in the specific options discussed in Chapter V.

^{10.} Specific options for means-testing are discussed in the next section.

^{11.} Similar problems have arisen with Medicaid, in which initial eligibility depends on the level of assets—thereby giving applicants an incentive to transfer assets to relatives rather than use them to pay for expenses such as nursing home care. Medicaid now requires applicants to wait two years before becoming eligible if they have given assets to relatives for the purpose of becoming Medicaid-eligible.

THE ROLE OF MEANS-TESTING

Another approach to cost-sharing would be to make receipt of benefits conditional upon income (or some other measure of economic resources), or to structure benefits differentially for persons at various levels of income. So far, Medicare benefits have not been means-tested. Such a change would represent a major philosophical shift in this program.

Medicare: A Benefit or Social Insurance Program?

One of the primary concerns in evaluating means-testing as an option for Medicare is the question whether this program is to be viewed as a benefit or an insurance program. If it is purely a social insurance program, many would argue that benefits should be available equally to all eligible enrollees on the ground that coverage is generally limited to those who have paid into the Social Security system for many years (or on whose behalf someone has paid).

The structure of Medicare, however, implies that it may not be purely a social insurance program. Social Security taxes now place a contribution equal to 2.6 percent of taxable payroll in the Medicare trust fund, earmarked for HI benefits. These contributions have only been made since 1966, however, and payment of benefits to the aged and disabled far outstrip the actuarial value of their contributions into the system. Moreover, the level of contributions made is not tied directly to the amount of benefits received. Although each year new enrollees have a longer history of contributions, the rate of return on such payments is projected to remain very high. For example, an elderly couple each reaching age 65 in 1982, of whom one spouse had average covered earnings over the 1966 to 1982 period, would have paid in \$2,200. The present value of their future lifetime benefits is projected to be \$63,000--28.6 times the contribution. If

^{12.} Many aged and disabled enrollees are also served by the Medicaid program. Consequently, some analysts argue that this eliminates any need for means-testing Medicare. But Medicaid benefits vary considerably by state, and in general are limited to the very poor.

^{13.} The 2.6 percent is the combined employer-employee contribution. For self-employed individuals, the figure is 1.3 percent in 1983.

^{14.} This estimate is based on 1982 Alternative II-B assumptions as contained in the Annual Report of the Board of Trustees of the HI trust fund. The return to a couple both working would be lower. Moreover, contributions will rise over time as people pay in for longer than the 17 years in this example.

SMI has less claim to being social insurance, particularly for the elderly. It receives no payroll tax contributions, and any elderly person can participate regardless of Social Security elgibility. SMI premiums currently pay for only 25 percent of program costs, so it could be considered largely a benefit program.

The Rationale for Means-Testing Medicare Benefits

If benefits under Medicare were restructured to reduce federal outlays, some form of means-testing might distribute the burden so as to alleviate the impact on those with modest incomes. For example, hospital coinsurance could be raised in the early days of a hospital stay but by more for those with higher incomes. Small savings from the low-income group would be offset by greater savings from those with higher incomes. While raising beneficiary liability by an average of \$500 per year might be considered unacceptable for elderly or disabled beneficiaries with low incomes, it would seem more reasonable for those with incomes of, say, \$20,000 per year.

Such changes might even be viewed as providing additional protection to low-income persons, rather than as denying coverage to high-income enrollees. For example, increased hospital or physician coinsurance could be combined with a cap on the out-of-pocket liability of low-income beneficiaries. Similarly, since SMI benefits are subsidized out of general revenues and are unrelated to Social Security trust funds, it might be reasonable to lower this subsidy (by raising the premium) to those with high levels of resources.

Problems with Means-Testing

Aside from the general criticism that means-testing would change the social insurance nature of Medicare, many of the other objections to such an option center on the practical problems associated with implementing it—the need to define and measure resources appropriately and then to develop a viable structure for a means test. Most of these issues are common to all means-tested programs, however, so they do not necessarily preclude the implementation of means-testing under Medicare.

^{15.} Although a few high-income enrollees might be able to obtain additional catastrophic protection through the medical deduction provided by the personal income tax, the number of such enrollees would be very small.